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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/791,212	JONES ET AL.				
Office Action Summary	Examiner	Art Unit				
	Adam K. Duda	4181				
The MAILING DATE of this communication ap	pears on the cover sheet with the c	correspondence address				
Period for Reply	V IO OET TO EVEIDE AMONTHI	0) OD TUUDTY (00) BAYO				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>02 №</u>	March 2004.					
• • • • • • • • • • • • • • • • • • • •	s action is non-final.					
3) Since this application is in condition for allowa						
closed in accordance with the practice under I	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-34</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-34</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on <u>03/02/2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correc	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
<ul><li>2. Certified copies of the priority documents have been received in Application No</li><li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li></ul>						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal F					
Paper No(s)/Mail Date	6) 🔲 Other:	• •				

Art Unit: 4181

## **Detailed Action**

## Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: SYSTEM AND METHOD FOR TIME SYNCHRONIZATION USING NTP IN A SMALL OFFICE / HOME NETWORK THROUGH A SUBSCRIPTION FEE.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-4, 6-21, 23-29, 31, and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over **Hodge et al. (U.S. 6,438,702 B1)** and further in view of **Cisco SOHO**90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages.

Consider claim 1, **Hodge et al.** disclose a method of clock setting comprising (see **Hodge**; **Abstract**; the time synchronization, therefore clock setting): receiving

Application/Control Number: 10/791,212

Page 3

Art Unit: 4181

a time synchronization request at a home network node (see Hodge; Abstract; time synchronization request is received by customer premise equipment, therefore a network node, a computer); and, however Hodge et al. does not specifically disclose receiving a time synchronization request at a home network node comprising a web server; and outputting a time signal to a requesting device via a home network, the requesting device comprising a different node of the home network. Cisco SOHO 90 Series Secure Broadband Router Data Sheet specifies receiving a time synchronization request at a home network node comprising a web server (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set Up and Deployment"; page 3 "Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series"; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; a home and small office router that is computer premise equipment, therefore equipment located on the customer network premises, such as web server, as a result contains a http daemon, that recognizes network time protocol synchronization requests, thus receiving time synchronization requests); and outputting a time signal to a requesting device via a home network, the requesting device comprising a different node of the home network (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; simple network time protocol server and client support, therefore network time protocol

information is gathered from a remote NTP server while listening for customer premise equipment's, such as a home network client, time signal requests).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by specifying receiving a time synchronization request at a home network node comprising a web server; and outputting a time signal to a requesting device via a home network, the requesting device comprising a different node of the home network, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible.

Consider claim 14, Hodge et al. discloses a time adjustment system (see Hodge et al.; Abstract; a time synchronization system, therefore time adjustment system), however Hodge et al. does not specifically specify a time adjustment system comprising: a housing component at least partially defining an external surface and an internal cavity; a broadband modem component at least partially located within the internal cavity; a home networking mechanism at least partially located within the internal cavity and communicatively coupled to the broadband modem, the home networking mechanism operable to facilitate providing a home network node with access to a backhaul enabled by the broadband modem; a processor at least partially located within the internal cavity and communicatively coupled to the broadband modem and to a memory; and the memory comprising instructions operable to direct the processor to embody a web server, to receive a timing signal from a remote Public

Page 5

Art Unit: 4181

Internet time code protocol server, and to communicate time information representing the timing signal to the home network node via the home networking mechanism. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses A time adjustment system (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet: page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; router runs network time protocol client and server to provide time adjustment functionality), comprising: a housing component at least partially defining an external surface and an internal cavity (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 Figure 1 "SOHO 90 Series Secure Broadband Routers"; a housing component with an external surface and an internal cavity); a broadband modem component at least partially located within the internal cavity (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; a integrated broadband ADSL WAN port, a broadband modem component); a home networking mechanism at least partially located within the internal cavity and communicatively coupled to the broadband modem (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; page 1 Figure 1 "SEOHO 90 Series Secure Broadband Routers"; a home and small office networking router, a networking mechanism, located within the internal cavity with integrated broadband ADSL WAN port, a broadband modem component), the home networking mechanism operable to facilitate providing a home network node with access to a backhaul enabled

by the broadband modem (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; page 1 "Secure Internet Access"; page 1 "Easy Set Up and Deployment"; the networking router, a networking mechanism, enables broadband connection sharing by the broadband modem); a processor at least partially located within the internal cavity and communicatively coupled to the broadband modem and to a memory (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 Table 2 "Cisco SOHO 90 Series Hardware Specification"; a router processor from the router, therefore located within the internal cavity and in communication to the memory and broadband modem) the memory comprising instructions operable to direct the processor to embody a web server (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Easy Set Up and Deployment"; page 3 "Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series"; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; the router is a web server, therefore the memory comprises instructions operable to direct the processor), to receive a timing signal from a remote Public Internet time code protocol server (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; router supports being a network time protocol server and client, thus receiving a timing signal), and to communicate time information representing the timing signal to the home network node via the home networking mechanism (see Cisco SOHO 90 Series

Secure Broadband Routers Data Sheet; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; router supports being a network time protocol client and server, thus communicating time information to the home or small office network).

Page 7

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by specifying a time adjustment system comprising: a housing component at least partially defining an external surface and an internal cavity; a broadband modem component at least partially located within the internal cavity; a home networking mechanism at least partially located within the internal cavity and communicatively coupled to the broadband modem, the home networking mechanism operable to facilitate providing a home network node with access to a backhaul enabled by the broadband modem; a processor at least partially located within the internal cavity and communicatively coupled to the broadband modem and to a memory; and the memory comprising instructions operable to direct the processor to embody a web server, to receive a timing signal from a remote Public Internet time code protocol server, and to communicate time information representing the timing signal to the home network node via the home networking mechanism, as taught by Cisco SOHO 90 Series Secure Broadband Routers Data Sheet, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible and simplifying the network infrastructure node complexity.

Page 8

Art Unit: 4181

Consider claim 28, Hodge et al discloses a method of adjusting a remote time keeping device system (see Hodge et al.; Abstract; a time synchronization method, adjusting a remote time keeping device system), comprising: making a remote time adjustment service available to a subscriber of a data service (see Hodge et al.; Abstract; col. 1 lines 5-8; col. 2 lines 26-65; timing information is provided in communications networks) communicatively coupling a service provider network node with a piece of customer premises equipment (CPE) associated with the subscriber (see Hodge et al.; Figure 1; col. 4 lines 31-52; col. 7 lines 5-19; a network provider network providing timing information to the customer premise **equipment)**, receiving a request for time information communicated from the piece of CPE via a communication link at least partially interconnecting the service provider network node and the piece of CPE (see Hodge et al.; col. 2 lines 27-65; col. 4 lines 36-41; time server supplies time information to customer premise equipment through links, therefore the time server responding to requests for time information from the CPE's) maintaining time information representing a Coordinated Universal Time value in a memory (see Hodge et al.; col. 1 lines 5-8; invention provides universal time information, therefore Coordinated Universal Time values); and outputting an Internet Protocol (IP) packet via the broadband communication link, the IP packet comprising at least a partial representation of the time information (see Hodge et al.; col. 2 lines 27-65; col. 4 lines 36-41; time server supplies time information to customer premise equipment through links, therefore IP packets containing universal time information are transmitted

Page 9

Art Unit: 4181

through links), however Hodge et al. does not specifically disclose making a remote time adjustment service available to a subscriber of a broadband data service; the piece of CPE comprising a broadband modem device; receiving a request for time information communicated from the piece of CPE via a broadband communication link at least partially interconnecting the service provider network node and the piece of CPE; outputting an Internet Protocol (IP) packet via the broadband communication link, the IP packet comprising at least a partial representation of the time information. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses specifically disclose making a remote time adjustment service available to a subscriber of a broadband data service (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; the router provides broadband internet service, thus data service, while providing time adjustment service through the network time protocol); the piece of CPE comprising a broadband modem device (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; the broadband router, a piece of computer premise equipment (CPE), router comprises a broadband modem device); receiving a request for time information communicated from the piece of CPE via a broadband communication link at least partially interconnecting the service provider network node and the piece of CPE (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use,

Supported by Cisco SOHO 90 Series Routers"; a router, thus a piece of CPE, that has a broadband communication link used for connecting to a service provider to receive timing information at the router, a piece of CPE); outputting an Internet Protocol (IP) packet via the broadband communication link, the IP packet comprising at least a partial representation of the time information (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; router supports the NTP protocol, therefore does NTP communication, that contains time information, through the broadband communication link).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by making a remote time adjustment service available to a subscriber of a broadband data service; the piece of CPE comprising a broadband modem device; receiving a request for time information communicated from the piece of CPE via a broadband communication link at least partially interconnecting the service provider network node and the piece of CPE; outputting an Internet Protocol (IP) packet via the broadband communication link, the IP packet comprising at least a partial representation of the time information, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible while allowing for advanced management capabilities (page 1 "Affordable, secure, easy-to-use, broadband access for small offices").

Art Unit: 4181

Consider claim 2, **Hodge et al.** does not specifically disclose wherein the home network node further comprises a Network Time Protocol (NTP) server. **Cisco SOHO**90 Series Secure Broadband Router Data Sheet discloses wherein the home network node further comprises a Network Time Protocol (NTP) server (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; the router supports functionality to be a network time protocol server).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by wherein the home network node further comprises a Network Time Protocol (NTP) server, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible while simplifying the network infrastructure node complexity.

Consider claim 3, **Hodge et al.** does not specifically disclose wherein the home network node further comprises a broadband modem (i.e. to provide a network connection). **Cisco SOHO 71 Broadband Router Data Sheet** discloses wherein the home network node further comprises a broadband modem (i.e. to provide a network connection; see Cisco SOHO 71 Broadband Router Data Sheet; page 1 "Table 1 Benefits Overview of Cisco SOHO 71 Broadband router"; a broadband router that acts as a modem).

Art Unit: 4181

Consider claim 4, Hodge et al. does not specifically disclose wherein the home network node further comprises a router, further comprising establishing the home network with the router. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses wherein the home network node further comprises a router, further comprising establishing the home network with the router (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; a router which establishes a home or small office network).

Consider claim 6, Hodge et al. does not specifically disclose further comprising receiving at the home network node a network timing signal via a digital subscriber line access multiplexer. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses further comprising receiving at the home network node a network timing signal via a digital subscriber line access multiplexer (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 6 "Table 5"; a router that is digital subscriber line access multiplexer (DSLAM) interoperable).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by further comprising receiving at the home network node a network timing signal via a digital subscriber line access multiplexer, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby simplifying the network infrastructure node complexity.

Art Unit: 4181

Consider claim 7, Hodge et al. does not specifically disclose receiving at the home network node a network timing signal via a cable modem termination system.

Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses receiving at the home network node a network timing signal via a cable modem termination system (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; a NTP compatible router that connects to the internet using a cable or DSL modem, therefore receives a network timing signal via a cable modem termination system).

Consider claim 8, Hodge et al. teaches the method, wherein the different node comprises a piece of Internet Protocol enabled Customer Premises Equipment (IP-enabled CPE) (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore computer equipment connected to the network on the customer premises, is present)

Consider claim 9, Hodge et al. teaches the method of claim 8, wherein the IP-enabled CPE is selected from a group consisting of a telephone, a clock, a kitchen appliance, a television, a game console, and a Set Top Box (STB) (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore equipment connected to the network on the customer premises, is present and time synchronized with the network provider's time server).

Art Unit: 4181

Consider claim 10, Hodge et al. does not specifically disclose further comprising utilizing a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.) to respond to the time synchronization request. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses further comprising utilizing a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.) to respond to the time synchronization request (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set Up and Deployment"; page 3 "Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series"; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; a router that is a web server, therefore contains a http daemon, that recognizes network time protocol synchronization requests).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Hodge et al. by Cisco SOHO 90 Series Secure Broadband Router Data Sheet, as taught by Cisco SOHO 90 Series Secure Broadband Router Data Sheet, thereby allowing for easy setup and deployment (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set up and Deployment").

Consider claim 11, **Hodge et al.** does not specifically disclose further comprising: recognizing the time synchronization request with a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.); accessing information from a Network

Time Protocol (NTP) server (i.e. a switch or router running NTP) executing at the home network node, the information representing a Coordinated Universal Time value; and including a representation of the information in the time signal. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses further comprising: recognizing the time synchronization request with a Hypertext~, Transfer Protocol daemon (i.e. http server, web server, etc.; see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set Up and Deployment"; page 3 "Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series"; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; a router that is a web server that recognizes time synchronization requests); accessing information from a Network Time Protocol (NTP) server (i.e. a switch or router running NTP) executing at the home network node, the information representing a Coordinated Universal Time value (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; a network time protocol, therefore information sent is representing a Coordinated Universal Time); and including a representation of the information in the time signal (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; network time protocol data represent time signal data).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by disclose further comprising: recognizing the time synchronization request with a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.); accessing information from a Network

Time Protocol (NTP) server (i.e. a switch or router running NTP) executing at the home network node, the information representing a Coordinated Universal Time value; and including a representation of the information in the time signal, as taught by Cisco SOHO 90 Series Secure Broadband Router Data Sheet, thereby creating network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible.

Consider claim 12, Hodge et al. discloses receiving time synchronization requests at the home network node (see Hodge et al.; col. 4 lines 32-65; retrieval of time synchronization requests at the computer premise equipment, the home network node), however Hodge et al. does not specifically disclose outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. computer premise equipment) of the home network. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. computer premise equipment) of the home network (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; router acts as an SNTP server, therefore sending time synchronization information to different requesting computer premise equipment on the home or small office network).

Art Unit: 4181

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby creating network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible.

Consider claim 13, **Hodge et al.** does not specifically disclose further comprising: receiving another time synchronization request at the home network node outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. computer premise equipment) of the home network. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses further comprising: receiving another time synchronization request at the home network node (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; router acts as an SNTP client, therefore receiving time synchronization requests at the home or small office network node) and outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. computer premise equipment) of the home network (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; router acts as an SNTP server, therefore sending time synchronization

Art Unit: 4181

information to different requesting computer premise equipment on the home or small office network).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by further comprising: receiving another time synchronization request at the home network node outputting another time signal to a different requesting device via the home network, the different requesting device comprising another node (i.e. computer premise equipment) of the home network, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby creating thereby creating network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible.

Consider claim 15, Hodge et al. does not specifically disclose further comprising a network operator access concentrator (i.e. a device that allows for communication between two devices) communicatively coupled to the broadband modem and operable to pass the timing signal. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses further comprising a network operator access concentrator (i.e. a device that allows for communication between two devices) communicatively coupled to the broadband modem and operable to pass the timing signal (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 6 "Table 5"; network time protocol is a client and server therefore receives timing

Art Unit: 4181

signal through broadband connection, therefore communication between the broadband modem and timing signal exists).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by disclosing further comprising a network operator access concentrator (i.e. a device that allows for communication between two devices) communicatively coupled to the broadband modem and operable to pass the timing signal, as taught by Cisco SOHO 90 Series Secure Broadband Router Data Sheet, thereby simplifying the network infrastructure node complexity.

Consider claim 16, Hodge et al. does not specifically disclose wherein the access concentrator (i.e. a device that allows for communication between two devices) comprises a digital subscriber line access multiplexer. Cisco SOHO 90

Series Secure Broadband Router Data Sheet discloses the access concentrator (i.e. a device that allows for communication between two devices) comprises a digital subscriber line access multiplexer (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 6 "Table 5"; a router that is digital subscriber line access multiplexer (DSLAM) interoperable).

Consider claim 17, **Hodge et al.** does not specifically disclose the access concentrator comprises a cable modern termination system. **CISCO SOHO 90 Series Secure Broadband Router Data Sheet** discloses the access concentrator comprises a

Art Unit: 4181

cable modem termination system (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; a NTP compatible router that connects to the internet using a cable or DSL modem, therefore receives a network timing signal via a cable modem termination system).

Consider claim 18, Hodge et al. teaches the system, further comprising the home network node, wherein the home network node comprises a Voice over Internet Protocol (VoIP) telephone (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore Voice over Internet Protocol (VoIP) telephone equipment connected to the network on the customer premises).

Consider claim 19, Hodge et al. teaches the system, further comprising the home network node, wherein the home network node comprises a clock (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore a clock equipment connected to the network on the customer premises).

Consider claim 20, Hodge et al. teaches the system, further comprising the home network node, wherein the home network node comprises an oven (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore an oven connected to the network on the customer premises).

Art Unit: 4181

Consider claim 21, Hodge et al. teaches the system, further comprising the home network node, wherein the home network node comprises a piece of Internet Protocol enabled consumer electronic equipment (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore IP enabled equipment connected to the network on the customer premises).

Consider claim 23, Hodge et al. does not specifically disclose wherein the broadband modem comprises an xDSL modem. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses wherein the broadband modem comprises an xDSL modem (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 7 "SOHO 97 ADSL Specifications"; a router that supports DSL).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by wherein the broadband modem comprises an xDSL modem, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby simplifying the network infrastructure.

Consider claim 24, Hodge et al. does not specifically disclose wherein the broadband modem comprises a cable modem. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses wherein the broadband modem comprises a cable modem (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for the small offices"; broadband modem comprises a cable modem).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by wherein the broadband modem comprises a cable modem, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby simplifying the network infrastructure.

Consider claim 25, Hodge et al, teaches the system 14, further comprising a plurality of home network nodes (see Hodge et al.; Figure 1; Abstract; computer premise equipment, therefore equipment connected to the network on the customer premises, is present).

Consider claim 26, Hodge et al. does not specifically disclose the system wherein the memory comprises instructions operable to direct the processor to broadcast the time information to the plurality of home network nodes. Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses the system wherein the memory comprises instructions operable to direct the processor to broadcast the time information to the plurality of home network nodes (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 4 "Tabel 2 Cisco SOHO 90 Series Hardware Specification"; page 5 "Table 4: Protocols and Features Supported by Cisco SOHO 90 Series Routers"; network time protocol is supported by the router as a client and server, therefore the memory comprises instructions operable to direct the processor to broadcast the time information to the plurality of home network nodes).

Art Unit: 4181

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by disclosing the system wherein the memory comprises instructions operable to direct the processor to broadcast the time information to the plurality of home network nodes, as taught by **Cisco SOHO 90 Series Secure Broadband Router Data Sheet**, thereby creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible.

Consider claim 27, Hodge et al. does not specifically disclose the system further comprising a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.) operable to receive a request for the time information from the home network node.

Cisco SOHO 90 Series Secure Broadband Router Data Sheet discloses the system further comprising a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.) operable to receive a request for the time information from the home network node (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set Up and Deployment"; page 3 "Table 1 Key Product Features and Benefits of the Cisco SOHO 90 Series"; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; a router that is a web server, therefore contains a http daemon, that recognizes network time protocol synchronization requests).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by disclosing the system further comprising a Hypertext Transfer Protocol daemon (i.e. http server, web server, etc.)

operable to receive a request for the time information from the home network node, as taught by Cisco Series Secure Broadband Router Data Sheet, thereby allowing for easy setup and deployment (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set up and Deployment) and simplifying the network infrastructure (topology).

Consider claim 29, Hodge et al. discloses further comprising providing the subscriber with the piece of CPE (see Hodge et al.; col. 1 lines 27-65; col. 4 lines 37-41; col. 7 lines 15-19; Figure 1; subscriber has computer premise equipment), the piece of CPE comprising a service provider network interface and a home network interface (see Hodge et al.; col. 1 lines 27-65; col. 4 lines 37-41; col. 7 lines 15-19; Figure 1: customer premise equipment is connected to network provider. therefore comprising a service provider network interface to connect), however Hodge et al. does not specifically disclose), the piece of CPE further comprising a Hypertext Transfer Protocol (HTTP) daemon operable to receive a home network request for time adjustment information from a home network node via the home network interface. Cisco SOHO 90 Series Secure Broadband Routers Data Sheet discloses the piece of CPE further comprising a Hypertext Transfer Protocol (HTTP) daemon operable to receive a home network request for time adjustment information from a home network node via the home network interface (see Cisco SOHO 90 Series Secure Broadband Router Data Sheet; page 1 "Easy Set Up and Deployment"; page 3 "Table 1 Key Product Features and Benefits of the Cisco SOHO 90

Series"; page 5 "Table 4 Protocols and Features Supported by Cisco SOHO 90 Series Routers"; page 5 "Table 4: Protocols and features Supported by Cisco SOHO 90 Series Routers"; a home and small office router that is computer premise equipment, therefore equipment located on the customer network premises, such as web server, as a result contains a http daemon, that recognizes network time protocol adjustment information).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al.** by the piece of CPE further comprising a Hypertext Transfer Protocol (HTTP) daemon operable to receive a home network request for time adjustment information from a home network node via the home network interface, as taught by **Cisco SOHO 90 Series Secure Broadband Routers Data Sheet**, thereby simplifying the network infrastructure (topology) and creating a network device that is more Internet Engineering Taskforce (IETF) request for comment (RFC) compatible.

Consider claim 31, Hodge et al. does not specifically disclose comprising a Point to Point over Ethernet (i.e. PPPoE: Point to Point Protocol over Ethernet) client executing on the processor. Cisco SOHO 90 Series Secure Broadband Routers

Data Sheet discloses comprising a Point to Point over Ethernet (i.e. PPPoE: Point to Point Protocol over Ethernet) client executing on the processor (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 4 "Table 2 Cisco SOHO 90

Art Unit: 4181

Series Hardware Specifications"; page 4 "Table 4 Protocols and Features

Supported by Cisco SOHO 90 Series Routers"; a processor that executes PPPoE client functionality).

Consider claim 34, Hodge et al. teaches further comprising: outputting a Network Time Protocol (NTP) request to a NTP server (see Hodge et al.; Figure 1; col. 1 lines 5-8; col. 2 lines 27-65; col. 4 lines 37-41; the computer premise equipment, therefore a router such as Cisco SOHO 90 Series Secure Router which is a NTP client and server, receives NPT requests and serves other computer premise equipment); receiving a response from the NTP server including a different Coordinated Universal Time value (i.e. universal time information; see Hodge et al.; col. 1 lines 5-8; universal time information is received from the provider time server) and updating the time information in the memory to represent the different Coordinated Universal Time value (see Hodge et al.; col. 2 lines 27-65; col. 7 lines 15-39; time synchronization between devices, thus a memory is updated to represent the universal time value).

Art Unit: 4181

3. Claims 5, 22 and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Hodge et al. (U.S. 6,438,702 B1) and Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages as applied to claims 1-4, 6-21, 23-29, 31, and 34 above, and further in view of Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T, 2002, Cisco Systems, all pages.

Consider claim 5, Hodge et al. and Cisco SOHO 90 Series Secure Broadband Router Data Sheet do not specifically disclose the router comprises a wireless router embodying an 802.11 (x) access point. Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T discloses the router comprises a wireless router embodying an 802.11 (x) access point (see Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T; page 4 "Limitations and Restrictions"; a wireless access point supporting IEEE 802.11 links).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco SOHO 90 Series Secure Broadband Router Data Sheet** by the router comprises a wireless router embodying an 802.11 (x)access point, as taught by **Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T**, thereby simplifying the network infrastructure (i.e. topology) by replacing two nodes with one node.

Consider claim 22, Hodge et al. and Cisco SOHO 90 Series Secure

Broadband Router Data Sheet do not specifically disclose wherein the home
networking mechanism comprises an 802.11 (x) access point. Release Notes for
Cisco Aironet 1200 Series Acces Points Running Firmware Version 12.00T
discloses wherein the home networking mechanism comprises an 802.11 (x) access
point (see Release Notes for Cisco Aironet 1200 Series Access Points Running
Firmware Version 12.00T; page 4 "Limitations and Restrictions"; a wireless
access point supporting IEEE 802.11 links).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco SOHO 90 Series Secure Broadband Router Data Sheet** by wherein the home networking mechanism comprises an 802.11 (x) access point, as taught by **Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T**, thereby simplifying the network infrastructure (i.e. topology) by replacing two nodes with one node.

Consider claim 30, Hodge et al. and Cisco SOHO 90 Series Secure

Broadband Routers Data Sheet discloses wherein the piece of CPE is an integrated home networking device comprising the broadband modern device, the HTTP daemon, a processor, a router (see Cisco SOHO 90 Series Secure Broadband Routers Data Sheet; page 1 "Affordable, secure, easy-to-use, broadband access for small offices"; page 4 "Table 2 Cisco SOHO 90 Series Hardware Specifications"; page 5 "Table 4 Protocols and features Supported by Cisco SOHO 90 Series Routers";

Art Unit: 4181

the router comprises a broadband mode, web server, thus a http daemon, and a processor), however Hodge et al. and Cisco SOHO 90 Series Secure Broadband Routers Data Sheet does not specifically disclose a local area wireless transceiver. Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T discloses a local area wireless transceiver (see Release Notes for Cisco Aironet 1200 Series Access Points Running Firmware Version 12.00T; page 2 "Introduction"; a local area wireless transceiver).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco SOHO 90 Series Secure Broadband Routers Data Sheet** by a local area wireless transceiver, as taught by **Cisco Aironet 1200 Series Access Point Running Firmware Version 12.00T**,

thereby simplifying the network infrastructure (topology) by integrating the components.

Art Unit: 4181

4. Claims 32 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Hodge et al. (U.S. 6,438,702 B1) and Cisco SOHO 90 Series Secure Broadband Routers, 1992-2002, Cisco Systems, all pages as applied to claims 1-4, 6-21, 23-29, 31, and 34 above, and further in view of van der Kaay et al. (U.S. 6,393,126 B1)

Consider claim 32, Hodge et al. and Cisco Series Secure Broadband Router Data Sheet does not specifically disclose maintaining a repository comprising information about the subscriber, the information indicating that the subscriber (i.e. client) subscribes to the remote time adjustment service; considering the information in connection with generating an; and including a charge for the remote time adjustment service in the invoice. Van der Kaay et al. discloses: maintaining a repository comprising information about the subscriber (see van der Kaay et al.; col. 15 lines 39-49; billing reports are created for individual clients automatically, therefore a repository is maintained with comprises information about the subscribers), the information indicating that the subscriber (i.e. client) subscribes to the remote time adjustment service (see van der Kaay et al.; col., 15 lines 39-49; a client is billed, therefore the client subscribes to the remote time adjustment service); considering the information in connection with generating an invoice (i.e. billing report) for the subscriber (see van der Kaay et al.; col. 15 lines 39-49; billing reports are created for individual clients automatically, therefore a repository is maintained with

Art Unit: 4181

comprises information about the subscribers); and including a charge for the remote time adjustment service in the invoice (see van der Kaay et al.; col. 15 lines 39-49; billing reports are created for individual clients automatically, therefore a repository is maintained with comprises information about the subscribers' remote time adjustment service).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco Series Secure Broadband Router Data Sheet** by maintaining a repository comprising information about the subscriber, the information indicating that the subscriber (i.e. client) subscribes to the remote time adjustment service; considering the information in connection with generating an; and including a charge for the remote time adjustment service in the invoice, as taught by **Van der Kaay et al.**, thereby facilitating the operation of the invention as an on-going business concern (col. 15 lines 39-49).

Consider claim 33, Hodge et al. and Cisco Series Secure Broadband Router

Data Sheet does not specifically disclose further comprising making the remote time
adjustment service available to a plurality of subscribers. Van der Kaay et al. discloses
further comprising making the remote time adjustment service available to a plurality of
subscribers (i.e. clients; see van der Kaay et al.; col. 15 lines 39-49; speaks of a
plurality of clients, thus the remote time adjustment service is available to a
plurality of subscribers).

Art Unit: 4181

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Hodge et al. and Cisco Series Secure Broadband Router Data Sheet** by further comprising making the remote time adjustment service available to a plurality of subscribers, as taught by **Hodge et al. and Cisco Series Secure Broadband Router Data Sheet**, thereby creating facilitating the operation of the invention as an on-going business concern **(col. 15 lines 39-49)**.

Art Unit: 4181

## Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

---, "Cisco SOHO 71 Broadband Router", 1992-2001, Cisco Systems, all pages.

Mills, David L., "Network Time Protocol (Version 3) Specification, Implementation, and Analysis (RFC 1305)", all pages.

Deeths, David et al., "Using NTP to Control and Synchronize System Clocks - Part I: Introduction to NTP", all pages.

Demopoulos, Drusie, "Switching routers answer the call for more bandwidth, performance", Jun 30, 1997, Network World, all pages

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam K. Duda whose telephone number is (571) 270-5136. The examiner can normally be reached on Increased Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4181

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11/19/2007

Adam K. Duda Patent Examiner Nov. 19<sup>th</sup>, 2007

/Nick Corsaro/ Supervisory Patent Examiner, Art Unit 4181